

Proposed Duck-Hunting Regulations for the 2002-03 Season

Frequently Asked Questions

August 16, 2002

What duck-hunting regulations are being proposed by the U.S. Fish and Wildlife Service (Service)?

The Service is proposing to adopt the liberal regulatory alternative as described in the July 17, 2002 **Federal Register**. Basic season lengths, bag limits, and framework dates for the liberal alternative, as well as for the other alternatives considered, are described in Table 1. The proposed regulations for most ducks are the same as those enacted during the 1997 through 2001 hunting seasons, except that the earliest opening and latest closing framework dates would be extended by about a week. The hunting season for pintails would be restricted from 107 days to 60 days in the Pacific Flyway, from 74 to 39 days in the Central Flyway, and from 60 to 30 days in the Mississippi and Atlantic Flyways. The hunting season on canvasbacks would be closed. Regulatory restrictions already in place on the harvest of several other species of ducks, including black ducks and scaup, would be maintained.

What duck-hunting regulations were proposed by the Flyway Councils?

The Atlantic Flyway Council and the Lower-Region Regulations Committee of the Mississippi Flyway Council recommended adoption of the liberal regulatory alternative. The Upper-Region Regulations Committee of the Mississippi Flyway Council and the Pacific Flyway Council recommended adoption of the moderate alternative for duck hunting seasons in 2002-03. The Central Flyway Council recommended the adoption of the liberal alternative, except they recommended a closing framework date of the Sunday nearest January 20.

All four Flyway Councils recommended that the Canvasback Harvest Management Strategy be changed so that hunting seasons would be open with a daily bag limit of one, if the population model predicts a subsequent year breeding population of 400,000 or more.

The Atlantic Flyway Council recommended that the pintail season be limited to 20 days with a bag limit of one bird per day in the states of Georgia, Florida, North Carolina and South Carolina. The Upper-Region Regulations Committee of the Mississippi Flyway Council recommended a 45-day pintail season, while the Lower-Region Regulations Committee of the Mississippi Flyway Council recommended a 30-day season. The Central Flyway Council recommended an open pintail season with a 1-bird daily bag limit for the entire duck season. The Pacific Flyway Council recommended the Service adopt the season length of the restrictive alternative (60 days) for pintail.

How can the Service justify liberal regulations in the face of deteriorating breeding habitat conditions and declining populations?

Although the number of ponds in the prairies and parklands of mid-continent North America declined dramatically this spring, the total population of breeding ducks remained near their long-term average. Also, the population size of the mallard, which is the most abundant species in the duck harvest, did not decline significantly from last year. Based on extensive biological assessments, as well as a consideration of recent changes in both population size and pond numbers, the Service concluded that mallards can support harvest rates associated with the 2002 liberal regulatory alternative without long-term adverse impact. (The harvest rate represents the percent of the population harvested. For example, the harvest rate on adult male mid-continent mallards during the 2001-02 liberal season was 11%, and with framework-date extensions it is expected to be 14%.) Although the assessments are not as conclusive for other species as they are for mallards, the Service notes that harvest rates of most species tend to be lower than those for mallards. The Service has proposed, however, to reduce hunting pressure on those species whose population status is of special concern.

Why do the hunting regulations differ among the Flyways?

The basic differences in regulations among Flyways were established in the late 1940s. The differences among Flyways were based on relative numbers of hunters, abundance of ducks during winter, and availability of waterfowl habitat. Regulations are more restrictive in the two eastern Flyways where the potential for hunting pressure is highest.

Will the framework-date extensions increase duck harvests?

It's very difficult to say because we don't have experience with extended framework dates on a national basis. Based on those states where we have had some experience (Mississippi and Iowa), the Service's assessments suggest that the harvest of most ducks, particularly early- or late-migrating species, will increase. The Service estimates that offering framework-date extensions will increase the current average harvest rate (12 percent for adult males) to 14 percent for mid-continent mallards, and to 19 percent (from 18 percent for adult males) for eastern mallards. These potential increases were taken into consideration in proposing the hunting regulations for the 2002 season. The Service will monitor any changes in harvests carefully, and then use this experience to make any necessary adjustments in its predictions of future harvests.

How many States will take the framework-date extensions?

Based on a survey of Flyway Councils conducted in 1999, the Service estimates that 25 States will take advantage of the late closing date in at least a part of their State. Twelve States indicated they would take advantage of the early opening date. The Service will not know how many States actually use the extensions until States select their hunting regulations in early September.

Last year's duck season was disappointing for many hunters. What sort of season can waterfowl hunters expect this year?

Total duck harvest in the U.S. did decline last season by 9% compared to the previous year, but remained at a relatively high level. Harvests since 1995 have been comparable to the levels observed during the 1970s, which was also a period of relatively high duck abundance. Regardless of duck abundance and hunting regulations, however, hunting success can vary widely from year to year depending on changes in weather, habitat conditions, migration behavior, and many other environmental factors. In fact, harvest rates can vary as much from year-to-year under a particular season length as they do with major changes in the number of days in the season. Therefore, hunting success in any given year is impossible to predict. However, the reduced fall flight of ducks and low proportion of young birds this year could lead to lower hunting success overall when compared to the recent years of higher fall flights.

What is the outlook for next year's duck breeding population levels?

Duck populations originating from the mid-continent nesting areas are expected to decline between now and next year due to the poor production that is anticipated. The magnitude of the decline is hard to predict, however, and will depend in part on harvest levels this season. Those species that most depend on nesting habitat in the prairies and parklands of the north-central U.S. and southern Canada would be expected to experience the greatest impacts due to poor production. However, it is important to remember that periodic drought is a characteristic feature of the Prairie Pothole Region, and while it leads to short-term declines in duck numbers, it is necessary for the long-term productivity of prairie wetlands. The high productivity of prairie wetlands is due in large part to these periodic droughts, which help maintain water quality and prevent fish (which compete with ducklings for food) from becoming too abundant. Moreover, conservation efforts to restore wetland basins and improve nesting cover are continuing to make significant progress, and will enhance the value of precipitation once it returns to normal levels.

Could liberal regulations this year result in more restrictive regulations next year?

The Service's assessments suggest that more restrictive regulations (e.g., the moderate alternative) would reduce harvest rates only slightly, and would likely lead to only small differences in population size next year. Many duck breeding populations are likely to decline next year regardless of the hunting regulations this year. Such declines typically are short-lived, and are a natural part of cyclic habitat conditions in the mid-continent breeding areas. Whether hunting regulations are restricted next year depends more on breeding-habitat conditions next year than the choice of hunting regulations this year.

When hunting restrictions are warranted, why not simply reduce the bag limit instead of shortening the season?

Restrictions on bag limit rather than on season length are preferred by many duck hunters when hunting restrictions are warranted. However, season length has much more of an impact on the

magnitude of harvests than bag limits. Reductions in bag limit are only marginally effective at reducing harvests because the daily bag limit is seldom achieved by most hunters. Restrictions in season length, on the other hand, keep hunters out of the field and overall harvest can be more effectively reduced.

Why was the daily bag limit of mallard hens not reduced further this year?

Mallard hen restrictions are popular with some hunters and waterfowl managers, and have been used since the early 1970s. The objective of these regulations is to direct harvest pressure away from females and thus increase annual survival of females relative to males. The Service continues to use regulations that emphasize protection of mallard females while allowing optimum recreational opportunity on males. Also, many hunters avoid shooting hens, exercising a self-imposed constraint. However, there is little evidence that a further reduction in the female mallard bag limit can help re-build populations more quickly following periods of drought on the breeding grounds.

What is Adaptive Harvest Management (AHM) and who is responsible for the process?

AHM was developed cooperatively by the Service, the Flyway Councils, and the U. S. Geological Survey to bring more scientific rigor and objectivity to the regulations-setting process. The AHM process was designed as a way for all interests to work cooperatively to review all of the information available on duck populations and to develop as much consensus as possible on regulatory decisions. From a more formal perspective, AHM is based on the application of decision theory, which has been applied extensively in private industry to help managers make good decisions in the face of uncertainty. AHM exemplifies an emerging consensus among the scientific community that adaptive management is the best possible approach to natural resource management.

The critical elements of AHM are: (a) agreed upon harvest management objectives; (b) a finite set of regulatory alternatives (e.g., very restrictive, restrictive, moderate, and liberal); (c) statistical models of population dynamics; and (d) a resource monitoring program. The “adaptive” aspect refers to the evolution of harvest-management strategies over time based on a comparison of observed population responses with those predicted by the models of population dynamics. AHM consists of not one population model, but a collection of models that represent different, but plausible, views of how duck populations respond to harvest and other environmental factors. Those models that make the best predictions based on experience are favored and, thus, have more of an influence on harvest strategies than models that are poorer predictors.

The technical aspects of the AHM process are overseen by a working group comprised of waterfowl biologists from the Service, USGS, and the four Flyway Councils. This working group makes technical recommendations based on consensus for consideration by the Service and Flyway Councils. The Service’s coordinator of the AHM Working Group is Fred Johnson,

Division of Migratory Bird Management (fred_a_johnson@fws.gov).

There were modifications made this year to the AHM process. What were they, and what are their implications for future duck seasons?

The population models upon which harvest regulations for mid-continent and eastern mallards have been in place since 1995 and 2000, respectively. However, the basic structure of the models, alternative hypotheses of population dynamics, and evidence associated with each hypothesis (i.e., model “weights”) are subject to continuous review. This year, some important revisions have been made to these protocols. Most importantly, corrections have been made for the positive bias in birth and survival rates of mid-continent and eastern mallards (for more details about how these corrections were made, refer to the technical reports available on the AHM website at <http://migratorybirds.fws.gov/mgmt/ahm/ahm-intro.htm>).

Although there was some indication of bias in estimated birth and survival rates as early as the late 1970s, it was not a critical concern because predictive population models were not used to help set hunting regulations. With the advent of AHM and the use of models to help guide the setting of regulations, it has become necessary to correct population models for any source of bias. The bias-correction made this year results in a slightly more conservative regulatory strategy (i.e., the regulations prescribed for a variety of population and pond levels) for mid-continent mallards. In other words, we can expect more years of conservative hunting regulations and fewer years of liberal regulations than if the bias were left uncorrected. However, correction for the bias would NOT have changed the liberal hunting regulations since 1995 because population and pond numbers were so high. The bias correction has had little effect on the outlook for regulations in the Atlantic Flyway, which are based on the status of eastern mallards. The source of the bias remains unknown, but monitoring programs used to estimate survival and birth rates are being carefully scrutinized.

Are recommendations for regulations through the AHM process based on just mallards? If so, what about other species?

Currently, the AHM process focuses on the mallard, which is among the most widespread and abundant duck species in North America. Also, much more is known about the population dynamics of mallards than any other species. However, not all duck species have the same potential to support harvest as the mallard (some species, like canvasbacks have lower harvest potential, while others, like blue-winged teal have higher potential). Therefore, a major challenge in setting a common duck hunting season is accounting for the differences among species. The Service has asked the AHM Working Group to make this issue its highest priority and the intent is to begin reviewing some alternative approaches with the Flyway Councils by early next year. In the short-term, however, the Service has proposed restrictions on those species that might not receive adequate protection under the current AHM process.

Why is the Service proposing to close the hunting season on canvasbacks?

The Service's proposal to close the canvasback season is based on a regulatory strategy that incorporates: (a) a harvest management objective to permit harvests consistent with maintaining the breeding population at or above 500,000 birds; (b) regulatory alternatives consisting of either a one-bird daily bag limit nationwide for the entire duck season or a closed season; and (c) a biological assessment of an allowable harvest. Unfortunately, no amount of harvest in the contiguous U.S. this year is consistent with the desire to maintain a breeding population goal of 500,000. Therefore, the Service believed it was necessary to propose a closed season.

Why did the Service not propose lowering the canvasback population goal as suggested by the Flyway Councils?

The canvasback population goal of 500,000 was established in an 1976 Environmental Assessment, and was subsequently used in the National Species of Special Emphasis document, the National Waterfowl Management Plan, and a 1983 Environmental Assessment. The Service recognizes, however, that selection of a population goal is guided both by duck biology and the values we as a society place on duck abundance. Therefore, the Service is willing to consider a change in the canvasback population goal, but believes that the biological and regulatory implications of such a change must be thoroughly explored. The Service is prepared to work with the Flyway Councils to conduct such assessments.

Why have canvasback seasons been closed on a reoccurring basis?

Canvasbacks have never been extremely abundant and their life-history characteristics make them more vulnerable to harvest than many other duck species. Canvasbacks tend to be relatively long-lived and have low reproductive potential, characteristics that limit their harvest potential. For these reasons, the Service has periodically closed the hunting season on canvasbacks.

Given the poor status of pintails, how can open hunting seasons be justified?

Managers are convinced that the reason for the long-term decline is related to changes in land-use practices and drought on the breeding grounds, particularly in western Prairie Canada. Declines in the abundance and quality of key wintering habitats may also be a contributing factor. Because harvest rates remain relatively low (less than 10%), the Service believes that some hunting opportunity can be justified, although the Service has proposed additional restrictions on pintail hunting this year.

How can the public provide comments about the Service's proposals?

The Service will propose regulations for the 2002-03 season in the **Federal Register**. Public comment of these proposals will be accepted until August 30, 2002 and should be addressed to Chief, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of

the Interior, room 634 - Arlington Square, 1849 C Street NW, Washington, D.C. 20240 or faxed to (703) 358-2272. The Service will finalize the regulations in early September, and States will make their season selections shortly thereafter.

Where can I get more information?

Information about duck populations and the regulations-setting process is available from the Service's Division of Migratory Bird Management website at <http://migratorybirds.fws.gov>. Detailed information about AHM can be found at <http://migratorybirds.fws.gov/mgmt/ahm/ahm-intro.htm>.

Table 1. Regulatory alternatives considered by the Service for the 2002-03 duck-hunting season. The Service is proposing selection of the liberal alternative.

| Regulation | Flyway | | | |
|--|--|--|----------------------|----------------------|
| | Atlantic ^a | Mississippi | Central ^b | Pacific ^c |
| Shooting hours | one-half hour before sunrise to sunset | | | |
| Framework dates | | | | |
| Very restrictive and Restrictive | Oct 1 - Jan 20 | Saturday nearest Oct 1 - Sunday nearest Jan 20 | | |
| Moderate and Liberal | Saturday nearest Sep 24 - last Sunday in Jan | | | |
| Season length (days) | | | | |
| Very restrictive | 20 | 20 | 25 | 38 |
| Restrictive | 30 | 30 | 39 | 60 |
| Moderate | 45 | 45 | 60 | 86 |
| Liberal | 60 | 60 | 74 | 107 |
| Bag limit (total / mallard / female mallard) | | | | |
| Very restrictive | 3 / 3 / 1 | 3 / 2 / 1 | 3 / 3 / 1 | 4 / 3 / 1 |
| Restrictive | 3 / 3 / 1 | 3 / 2 / 1 | 3 / 3 / 1 | 4 / 3 / 1 |
| Moderate | 6 / 4 / 2 | 6 / 4 / 1 | 6 / 5 / 1 | 7 / 5 / 2 |
| Liberal | 6 / 4 / 2 | 6 / 4 / 2 | 6 / 5 / 2 | 7 / 7 / 2 |

^a The states of Maine, Massachusetts, Connecticut, Pennsylvania, New Jersey, Maryland, Delaware, West Virginia, Virginia, and North Carolina are permitted to exclude Sundays, which are closed to hunting, from their total allotment of season days.

^b The High Plains Mallard Management Unit is allowed 8, 12, 23, and 23 extra days in the very restrictive, restrictive, moderate, and liberal alternatives, respectively.

^c The Columbia Basin Mallard Management Unit is allowed seven extra days in the very restrictive, restrictive, and moderate alternatives.